# **AUTHOR INDEX**

Adem, E., see Cota	35 (1988-89) 213	
Akhter, S., K. Allan, D. Buchanan, J.A. Cook, A. Campion and J.M. White,	55 (1500-05) 215	
XPS and IR study of X-ray induced degradation of PVA polymer film	35 (1988-89) 241	
Allan, K., see Akhter	35 (1988-89) 241	
Anderson, L.R., see Schmidt	35 (1988-89) 274	
Arnaud, Y. and M. Brunel, GIXD study of the kinetic evolution of nitrogen		
implanted steel surfaces at increasing fluences	35 (1988-89) 345	
Ask, M., J. Lausmaa and B. Kasemo, Preparation and surface spectroscopic		
characterization of oxide films on Ti6Al4V	35 (1988–89) 283	
Asscher, M., see Haase	35 (1988–89) 1	
Bala, H. and S. Szymura, Acid corrosion of amorphous and crystalline		
Cu-Zr alloys	35 (1988-89) 41	
Barbour, J.C., see Kuiper	35 (1988-89) 186	
Batcherikova, I.V., see Belousov	35 (1988-89) 481	
Batich, C.D., Chemical derivatization and surface analysis, Applied Surface		
Science 32 (1988) 57-73. Erratum	35 (1988-89) 280	
Beck, R.B., A model for the kinetics of constant current plasma anodization		
process	35 (1988-89) 76	
Beery, J.G., see Rogers, Jr.	35 (1988-89) 137	
Belousov, V.M., J. Stoch, I.V. Batcherikova, E.V. Rozhkova and L.V.		
Lyashenko, Low-temperature hydrogen reduction of pure Co <sub>3</sub> O <sub>4</sub> and		
doped with palladium	35 (1988–89) 481	
Belton, D.N., see Rogers, Jr.	35 (1988–89) 137	
Botha, A.P., see Relling	35 (1988–89) 380	
Bowker, M., see Dean	35 (1988–89) 27	
Brunel, M., see Arnaud	35 (1988–89) 345	
Buchanan, D., see Akhter	35 (1988–89) 241	
Buckley, A.N. and G.W. Walker, The surface composition of arsenopyrite		
exposed to oxidizing environments	35 (1988–89) 227	
Bukaluk, A., Determination of the activation energy of Ag diffusion through grain boundaries of thin Au films by using AES in a simplified accumula-		
tion method	35 (1988–89) 317	
Burrell, M.C. and J.J. Chera, Surface analysis of BPA-		
polycarbonate/poly(butylene terephthalate) blends by X-ray photoelec-		
tron spectroscopy	35 (1988–89) 110	
Campion, A., see Akhter	35 (1988–89) 241	
Chera, J.J., see Burrell	35 (1988-89) 110	
Colton, R.J., see Hues	35 (1988-89) 507	

Cook, J.A., see Akhter	35 (1988-89) 241
Cornelissen, H.J., see McGee III	35 (1988–89) 371
Cota, L., E. Adem, M.J. Yacamán and G. Soto, Electron stimulated desorp-	(,
tion study of irradiated poly(vinyl chloride)	35 (1988-89) 213
Craig, Jr., J.H., Characteristic energies of electronically desorbed ions from	
Rh(100)	35 (1988-89) 520
Dean, M. and M. Bowker, Adsorption studies on catalysts under UHV/HV	
conditions. I. Oxygen adsorption on alumina supported silver	35 (1988-89) 27
Deibert, M.C. and R.B. Wright, The surface composition and initial oxida-	
tion of zirconium-nickel intermetallic compounds at room temperature	35 (1988–89) 93
Deibert, M.C., B.P. Thiesen and R. Kahraman, Investigation by Auger	
spectroscopy of the composition and surface oxidation characteristics of	25 (1000 00) 202
oxygen saturated zirconium Domen, K., see Sakata	35 (1988–89) 302 35 (1988–89) 363
Domen, K., see Sakata	33 (1900-09) 303
El Gomati, M.M., see Walker	35 (1988-89) 164
El Gomati, M.M. and C.G.H. Walker, Contrast reversal in SAM mapping	
due to changes in the substrate atomic number	35 (1988-89) 177
Erickson, K.L., see Rogers, Jr.	35 (1988-89) 137
Es-Souni, M. and A. Mosser, AES study of the effect of segregated sulfur on	
the oxidation of an Fe-6at%Si alloy surface	35 (1988–89) 219
Fukui, S., see Nishigaki	35 (1988-89) 121
Grove, C.L. and L.D. Schmidt, The morphology of molybdenum catalysts	35 (1988-89) 199
Guczi, L., G. Kisfaludi, Z. Schay and A. Lovas, Surface structure and	
catalytic activity of rapidly quenched amorphous iron based alloys. III.	
Effect of surface composition	35 (1988–89) 469
Haase, G., M. Asscher and U. Linke, Interaction of N <sub>2</sub> with Fe covered	
Re(0001)	35 (1988-89) 1
Hatada, M., see Sugimoto	35 (1988–89) 388
Hegde, M.S., see Sampath Kumar	35 (1988–89) 63
Henderson, M.A., see Rogers, Jr.	35 (1988–89) 423
Hirokawa, K., see Matsuta	35 (1988–89) 10
Hono, K., H.W. Pickering and T. Sakurai, An atom-probe field ion micro-	
scope study of the initial stages of oxidation of copper and copper-iron	25 (1000 00) 205
alloy	35 (1988–89) 327
Hues, S.M., R.J. Colton, R.L. Mowery, K.J. McGrath and J.R. Wyatt,	
Determination of hydrogen in perfluorinated polyalkylethers using time- of-flight secondary ion mass spectrometry, infrared spectroscopy and	
nuclear magnetic resonance spectrometry	35 (1988-89) 507
nacioni inagnotic resonance specialinetry	35 (1900-09) 307
Jardin, C. and D. Robert, AES and ELS characterization of surface oxides	
on Al-Li alloys	35 (1988–89) 495
Kahraman, R., see Deibert	35 (1988-89) 302
Kasemo, B., see Ask	35 (1988-89) 283
Kelber, J.A., see Rogers, Jr.	35 (1988-89) 423
Kisfaludi, G., see Guczi	35 (1988-89) 469
Kuiper, A.E.T., M.F.C. Willemsen and J.C. Barbour, Thin film reactions in	
the system Ti-Si-O-N	35 (1988–89) 186

Lausmaa, J., see Ask	35 (1988-89) 283
Linke, U., see Haare	35 (1988–89) 1
Lisowski, W., Kinetics and thermodynamics of hydrogen interaction with	
thin cobalt films	35 (1988-89) 399
Lovas, A., see Guczi	35 (1988-89) 469
Lukeš, F., see Ohlídal	35 (1988-89) 259
Lyashenko, L.V., see Belousov	35 (1988-89) 481
Mallya, R.M., see Sampath Kumar	35 (1988–89) 63
Marinero, E.E., see Miller	35 (1988–89) 153
Maruya, K., see Sakata	35 (1988–89) 363
Matsuda, S., see Nishigaki	35 (1988-89) 121
Matsuta, H. and K. Hirokawa, SERS and XPS observation of the adsorption	
behavior of NO and NO <sub>2</sub> on a silver powder surface	35 (1988-89) 10
McGee III, T.F. and H.J. Cornelissen, X-ray photoelectron spectroscopy of	
etched ZnSe	35 (1988-89) 371
McGrath, K.J., see Hues	35 (1988–89) 507
Miller, D.C., E.E. Marinero and H. Notarys, XPS oxidation study of	
TbFeCo films	35 (1988-89) 153
Mosser, A., see Es-Souni	35 (1988–89) 219
Mowery, R.L., see Hues	35 (1988–89) 507
Murakami, A., see Nishigaki	35 (1988–89) 121
Murakami, A., see Nishigaki	33 (1966-69) 121
Nagai, S., see Sugimoto	35 (1988-89) 388
Nishigaki, S., M. Ohara, A. Murakami, S. Fukui and S. Matsuda, Adlayer formation and its local charge states of Li on Si(111)7 × 7 surface studied	
by $\Delta \phi$ , MDS and AES	35 (1988-89) 121
Notarys, H., see Miller	35 (1988–89) 153
Ohara, M., see Nishigaki	35 (1988–89) 121
Ohlidal, I. and F. Lukeš, Analysis of semiconductor surfaces with very thin	
native oxide layers by combined immersion and multiple angle of inci-	
dence ellipsometry	35 (1988–89) 259
Onishi, T., see Sakata	35 (1988–89) 363
Peacock, D.C., see Walker	35 (1988-89) 173
Pickering, H.W., see Hono	35 (1988-89) 327
Palling Front A.D. Dorbe Gallet and Alffred and Co.A. (Au.Co. Oli and	
Relling, E. and A.P. Botha, Solid state diffusion in GaAs/AuGe/Ni and	25 (1000 00) 200
GaAs/Ni/AuGe/Ni ohmic contacts	35 (1988–89) 380
Ri-Sheng Li, A comparative study of the surface composition changes of a	25 (1000 00) 400
Au <sub>0.5</sub> Cu <sub>0.5</sub> alloy under nitrogen and argon ion bombardment	35 (1988–89) 409
Riga, J., see Savy	35 (1988–89) 454
Robert, D., see Jardin	35 (1988–89) 495
Rogers, Jr., J.W., K.L. Erickson, D.N. Belton, R.W. Springer, T.N. Taylor and J.G. Beery, Low temperature diffusion of oxygen in titanium and	
titanium oxide films	35 (1988-89) 137
Rogers, Jr., J.W., J.A. Kelber, M.A. Henderson and J.M. White, The interac-	
Rogers, Jr., J.W., J.A. Kelber, M.A. Henderson and J.M. White, The interaction of trimethyl amine with a polyvinyl alcohol surface	35 (1988-89) 423

Sakata, Y., K. Domen, K. Maruya and T. Onishi, Decomposition of methanol over oxidized and reduced copper surfaces studied by double modulation	
Fourier transform infrared reflection absorption spectroscopy	35 (1988-89) 363
Sakurai, T., see Hono	35 (1988–89) 327
Sampath Kumar, T.S., R.M. Mallya and M.S. Hegde, Surface segregation	20 (2000 00) 02.
and oxidation studies on Cu-Ni-Sn and Ag-Cu-Ge ternary alloys	35 (1988-89) 63
Savy, M., J. Riga and J.J. Verbist, XPS investigation of thionyl chloride action on iron phthalocyanines and naphthalocyanines and on hydrogen	
phthalocynanine - correlations with the activity of Li/SOCl <sub>2</sub> cells	35 (1988–89) 454
Schay, Z., see Guczi	35 (1988–89) 469
Schmidt, H.K., L.R. Anderson and J.A. Schultz, Rapid and sensitive de- termination of hydrogen isotopes at a surface by Li <sup>+</sup> direct recoil spectroscopy	35 (1988-89) 274
Schmidt, L.D., see Grove	35 (1988–89) 199
Schultz, J.A., see Schmidt	35 (1988–89) 274
Soto, G., see Cota	35 (1988–89) 213
Springer, R.W., see Rogers, Jr.	35 (1988–89) 137
Stoch, J., see Belousov	35 (1988–89) 481
Sugimoto, S., S. Nagai and M. Hatada, Fischer-Tropsch reaction on iron	25 (1700 07) 101
catalysts prepared by electron beam implantation on Kapton film	35 (1988-89) 388
Szilágyi, T., Infrared spectra of methyl cyanide and methyl isocyanide	,
adsorbed on Pt/SiO <sub>2</sub>	35 (1988–89) 19
Szymura, S., see Bala	35 (1988–89) 41
Taylor, T.N., see Rogers, Jr.	35 (1988-89) 137
Thiesen, B.P., see Deibert	35 (1988–89) 302
Verbist, J.J., see Savy	35 (1988-89) 454
Walker, C.G. and D.C. Peacock, Tests of surface segregation theory. I. The	
Ni-5Pt alloy, Applied Surface Science 26 (1986) 306. Erratum + Com-	
ment	35 (1988-89) 173
Walker, C.G.H. and M.M. El Gomati, The role of zirconium and sulphur in	
the adherence of oxides on superalloys	35 (1988-89) 164
Walker, C.G.H., see El Gomati	35 (1988-89) 177
Walker, G.W., see Buckley	35 (1988-89) 227
White, J.M., see Zhou	35 (1988–89) 52
White, J.M., see Akhter	35 (1988-89) 241
White, J.M., see Rogers, Jr.	35 (1988-89) 423
White, J.M., see Zhou	35 (1988-89) 435
Willemsen, M.F.C., see Kuiper	35 (1988-89) 186
Wright, R.B., see Deibert	35 (1988-89) 93
Wyatt, J.R., see Hues	35 (1988–89) 507
Yacamán, M.J., see Cota	35 (1988–89) 213
Zhou, XL. and J.M. White, Determining kinetic parameters from temper-	
ature-programmed SIMS data Zhou, XL. and J.M. White, Interaction between $D_2$ and $N_2$ on (100)	35 (1988–89) 52
oriented W foil	35 (1988-89) 435

# SUBJECT INDEX

# Adsorption, see also Chemisorption

Ausorption, see also Chemisorption		
G. Haase, M. Asscher and U. Linke, Interaction of $N_2$ with Fe covered Re(0001)	35 (1988–89)	1
H. Matsuta and K. Hirokawa, SERS and XPS observation of the adsorption behavior of NO and NO <sub>2</sub> on a silver powder surface	35 (1988-89)	10
M. Dean and M. Bowker, Adsorption studies on catalysts under UHV/HV conditions. I. Oxygen adsorption on alumina supported silver	35 (1988–89)	27
W. Lisowski, Kinetics and thermodynamics of hydrogen interaction with thin cobalt films	35 (1988–89)	
XL. Zhou and J.M. White, Interaction between D <sub>2</sub> and N <sub>2</sub> on (100)		377
oriented W foil	35 (1988–89)	435
Alloys		
H. Bala and S. Szymura, Acid corrosion of amorphous and crystalline Cu-Zr		
alloys	35 (1988–89)	41
T.S. Sampath Kumar, R.M. Mallya and M.S. Hegde, Surface segregation and oxidation studies on Cu-Ni-Sn and Ag-Cu-Ge ternary alloys	35 (1988-89)	63
M.C. Deibert and R.B. Wright, The surface composition and initial oxidation	33 (1900-09)	0.3
of zirconium-nickel intermetallic compounds at room temperature	35 (1988-89)	93
C.G.H. Walker and M.M. El Gomati, The role of zirconium and sulphur in		
the adherence of oxides on superalloys	35 (1988–89)	164
C.G. Walker and D.C. Peacock, Tests of surface segregation theory. I. The		
Ni-5Pt alloy, Applied Surface Science 26 (1986) 306. Erratum + Com- ment	35 (1988-89)	173
M. Es-Souni and A. Mosser, AES study of the effect of segregated sulfur on	33 (1900-09)	1/3
the oxidation of an Fe-6at%Si alloy surface	35 (1988-89)	219
M. Ask, J. Lausmaa and B. Kasemo, Preparation and surface spectroscopic		
characterization of oxide films on Ti6Al4V	35 (1988–89)	283
K. Hono, H.W. Pickering and T. Sakurai, An atom-probe field ion micro- scope study of the initial stages of oxidation of copper and copper-iron		
alloy	35 (1988–89)	327
Ri-Sheng Li, A comparative study of the surface composition changes of a	33 (1700 07)	
Au <sub>0.5</sub> Cu <sub>0.5</sub> alloy under nitrogen and argon ion bombardment	35 (1988-89)	409
C. Jardin and D. Robert, AES and ELS characterization of surface oxides on		
Al-Li alloys	35 (1988–89)	495
Alumina		
M. Dean and M. Bowker, Adsorption studies on catalysts under UHV/HV	25 (1000 00)	27
conditions. I. Oxygen adsorption on alumina supported silver	35 (1988–89)	21

#### Aluminium

- H.K. Schmidt, L.R. Anderson and J.A. Schultz, Rapid and sensitive determination of hydrogen isotopes at a surface by Li<sup>+</sup> direct recoil spectroscopy
- 35 (1988-89) 274
- M. Ask, J. Lausmaa and B. Kasemo, Preparation and surface spectroscopic characterization of oxide films on Ti6Al4V
- 35 (1988–89) 283
- C. Jardin and D. Robert, AES and ELS characterization of surface oxides on Al-Li alloys

# 35 (1988-89) 495

## Amorphous materials

- H. Bala and S. Szymura, Acid corrosion of amorphous and crystalline Cu–Zr allovs
- 35 (1988-89) 41
- D.C. Miller, E.E. Marinero and H. Notarys, XPS oxidation study of TbFeCo films
- 35 (1988-89) 153
- L. Guczi, G. Kisfaludi, Z. Schay and A. Lovas, Surface structure and catalytic activity of rapidly quenched amorphous iron based alloys. III. Effect of surface composition
- 35 (1988-89) 469

### Anodization

- R.B. Beck, A model for the kinetics of constant current plasma anodization process
- 35 (1988-89) 76
- M. Ask, J. Lausmaa and B. Kasemo, Preparation and surface spectroscopic characterization of oxide films on Ti6Al4V
- 35 (1988-89) 283

# Auger electron spectroscopy

- T.S. Sampath Kumar, R.M. Mallya and M.S. Hegde, Surface segregation and oxidation studies on Cu-Ni-Sn and Ag-Cu-Ge ternary alloys
- 35 (1988–89) 63
- M.C. Deibert and R.B. Wright, The surface composition and initial oxidation of zirconium-nickel intermetallic compounds at room temperature
- 35 (1988-89) 93
- S. Nishigaki, M. Ohara, A. Murakami, S. Fukui and S. Matsuda, Adlayer formation and its local charge states of Li on Si(111)7  $\times$  7 surface studied by  $\Delta \phi$ , MDS and AES
- 35 (1988-89) 121
- J.W. Rogers, Jr., K.L. Erickson, D.N. Belton, R.W. Springer, T.N. Taylor and J.G. Beery, Low temperature diffusion of oxygen in titanium and titanium oxide films
  A.E.T. Kuiper, M.F.C. Willemsen and J.C. Barbour, Thin film reactions in
- 35 (1988–89) 137
- the system Ti-Si-O-N

  M. Es-Souni and A. Mosser, AES study of the effect of segregated sulfur on
- 35 (1988–89) 186 35 (1988–89) 219
- the oxidation of an Fe-6at%Si alloy surface

  M.C. Deibert, B.P. Thiesen and R. Kahraman, Investigation by Auger spectroscopy of the composition and surface oxidation characteristics of
- 35 (1988–89) 302
- oxygen saturated zirconium

  A. Bukaluk, Determination of the activation energy of Ag diffusion through grain boundaries of thin Au films by using AES in a simplified accumulation method
- 35 (1988-89) 317
- T.F. McGee III and H.J. Cornelissen, X-ray photoelectron spectroscopy of etched ZnSe
- 35 (1988-89) 371

<ul> <li>E. Relling and A.P. Botha, Solid state diffusion in GaAs/AuGe/Ni and GaAs/Ni/AuGe/Ni ohmic contacts</li> <li>J.W. Rogers, Jr., J.A. Kelber, M.A. Henderson and J.M. White, The interaction of trimethyl amine with a polyvinyl alcohol surface</li> <li>C. Jardin and D. Robert, AES and ELS characterization of surface oxides on Al-Li alloys</li> </ul> Boron	35 (1988–89) 380 35 (1988–89) 423 35 (1988–89) 495
L. Guczi, G. Kisfaludi, Z. Schay and A. Lovas, Surface structure and catalytic activity of rapidly quenched amorphous iron based alloys. III. Effect of surface composition	35 (1988–89) 469
Carbon	
M.C. Burrell and J.J. Chera, Surface analysis of BPA-polycarbonate/poly (butylene terephthalate) blends by X-ray photoelectron spectroscopy	35 (1988–89) 110
Carbon monoxide	
J.H. Craig, Jr., Characteristic energies of electronically desorbed ions from Rh(100)	35 (1988–89) 520
Catalysis	
<ul> <li>G. Haase, M. Asscher and U. Linke, Interaction of N<sub>2</sub> with Fe covered Re(0001)</li> <li>T. Szilágyi, Infrared spectra of methyl cyanide and methyl isocyanide ad-</li> </ul>	35 (1988–89) 1
sorbed on Pt/SiO <sub>2</sub> M. Dean and M. Bowker, Adsorption studies on catalysts under UHV/HV	35 (1988–89) 19
conditions. I. Oxygen adsorption on alumina supported silver C.L. Grove and L.D. Schmidt, The morphology of molybdenum catalysts S. Sugimoto, S. Nagai and M. Hatada, Fischer-Tropsch reaction on iron	35 (1988–89) 27 35 (1988–89) 199
catalysts prepared by electron beam implantation on Kapton film  M. Savy, J. Riga and J.J. Verbist, XPS investigation of thionyl chloride action on iron phthalocyanines and naphthalocyanines and on hydrogen	35 (1988–89) 388
phthalocynanine - correlations with the activity of Li/SOCl <sub>2</sub> cells	35 (1988–89) 454
Catalysts	
L. Guczi, G. Kisfaludi, Z. Schay and A. Lovas, Surface structure and catalytic activity of rapidly quenched amorphous iron based alloys. III. Effect of surface composition	35 (1988–89) 469
Chemisorption, see also Adsorption	
XL. Zhou and J.M. White, Interaction between $D_2$ and $N_2$ on (100) oriented W foil	35 (1988–89) 435

### Cobalt

W. Lisowski, Kinetics and thermodynamics of hydrogen interaction with thin cobalt films 35 (1988–89) 399

#### Cobalt oxide

V.M. Belousov, J. Stoch, I.V. Batcherikova, E.V. Rozhkova and L.V. Lyashenko, Low-temperature hydrogen reduction of pure Co<sub>3</sub>O<sub>4</sub> and doped with palladium 35 (1988-89) 481

### Copper

- H. Bala and S. Szymura, Acid corrosion of amorphous and crystalline Cu-Zr alloys 35 (1988-89) 41
- T.S. Sampath Kumar, R.M. Mallya and M.S. Hegde, Surface segregation and oxidation studies on Cu-Ni-Sn and Ag-Cu-Ge ternary alloys 35 (1988-89) 63
- H.K. Schmidt, L.R. Anderson and J.A. Schultz, Rapid and sensitive determination of hydrogen isotopes at a surface by Li<sup>+</sup> direct recoil spectroscopy

  35 (1988–89) 274
- spectroscopy
  K. Hono, H.W. Pickering and T. Sakurai, An atom-probe field ion microscope study of the initial stages of oxidation of copper and copper-iron

Fourier transform infrared reflection absorption spectroscopy

- alloy 35 (1988-89) 327
  Y. Sakata, K. Domen, K. Maruya and T. Onishi, Decomposition of methanol over oxidized and reduced copper surfaces studied by double modulation
- Ri-Sheng Li, A comparative study of the surface composition changes of a Au<sub>0.5</sub>Cu<sub>0.5</sub> alloy under nitrogen and argon ion bombardment 35 (1988–89) 409

35 (1988-89) 363

# Copper oxide

Y. Sakata, K. Domen, K. Maruya and T. Onishi, Decomposition of methanol over oxidized and reduced copper surfaces studied by double modulation Fourier transform infrared reflection absorption spectroscopy 35 (1988–89) 363

#### Corrosion

H. Bala and S. Szymura, Acid corrosion of amorphous and crystalline Cu–Zr alloys 35 (1988–89) 41

#### Cyanide

T. Szilágyi, Infrared spectra of methyl cyanide and methyl isocyanide adsorbed on Pt/SiO<sub>2</sub> 35 (1988–89) 19

### Desorption

L. Cota, E. Adem, M.J. Yacamán and G. Soto, Electron stimulated desorption study of irradiated poly(vinyl chloride) 35 (1988–89) 213

### Diffusion

J.W. Rogers, Jr., K.L. Erickson, D.N. Belton, R.W. Springer, T.N. Taylor and J.G. Beery, Low temperature diffusion of oxygen in titanium and titanium oxide films

35 (1988-89) 137

A. Bukaluk, Determination of the activation energy of Ag diffusion through grain boundaries of thin Au films by using AES in a simplified accumulation method

35 (1988-89) 317

E. Relling and A.P. Botha, Solid state diffusion in GaAs/AuGe/Ni and GaAs/Ni/AuGe/Ni ohmic contacts

35 (1988-89) 380

### Electrochemistry

M. Savy, J. Riga and J.J. Verbist, XPS investigation of thionyl chloride action on iron phthalocyanines and naphthalocyanines and on hydrogen phthalocyanine – correlations with the activity of Li/SOCl<sub>2</sub> cells

35 (1988-89) 454

#### Electron bombardment

S. Sugimoto, S. Nagai and M. Hatada, Fischer-Tropsch reaction on iron catalysts prepared by electron beam implantation on Kapton film

35 (1988-89) 388

### Electron energy loss spectroscopy

C. Jardin and D. Robert, AES and ELS characterization of surface oxides on Al-Li alloys

35 (1988-89) 495

#### Electron microprobe

C.G.H. Walker and M.M. El Gomati, The role of zirconium and sulphur in the adherence of oxides on superalloys

35 (1988-89) 164

#### Electron microscopy

C.L. Grove and L.D. Schmidt, The morphology of molybdenum catalysts

35 (1988-89) 199

#### Electron stimulated desorption

L. Cota, E. Adem, M.J. Yacamán and G. Soto, Electron stimulated desorption study of irradiated poly(vinyl chloride)

35 (1988-89) 213

J.H. Craig, Jr., Characteristic energies of electronically desorbed ions from Rh(100)

35 (1988-89) 520

#### Ellipsometry

I. Ohlidal and F. Lukeš, Analysis of semiconductor surfaces with very thin native oxide layers by combined immersion and multiple angle of incidence ellipsometry

35 (1988-89) 259

### Field ion microscopy

K. Hono, H.W. Pickering and T. Sakurai, An atom-probe field ion microscope study of the initial stages of oxidation of copper and copper-iron allow

### 35 (1988-89) 327

#### Gallium arsenide

E. Relling and A.P. Botha, Solid state diffusion in GaAs/AuGe/Ni and GaAs/Ni/AuGe/Ni ohmic contacts

# 35 (1988-89) 380

#### Germanium

 Ohlidal and F. Lukeš, Analysis of semiconductor surfaces with very thin native oxide layers by combined immersion and multiple angle of incidence ellipsometry

# 35 (1988-89) 259

#### Gold

A. Bukaluk, Determination of the activation energy of Ag diffusion through grain boundaries of thin Au films by using AES in a simplified accumulation method

### 35 (1988-89) 317

Ri-Sheng Li, A comparative study of the surface composition changes of a  $Au_{0.5}Cu_{0.5}$  alloy under nitrogen and argon ion bombardment

### 35 (1988-89) 409

#### Grain boundaries

A. Bukaluk, Determination of the activation energy of Ag diffusion through grain boundaries of thin Au films by using AES in a simplified accumulation method

# 35 (1988-89) 317

# Hydrogen

- X.-L. Zhou and J.M. White, Determining kinetic parameters from temperature-programmed SIMS data
- 35 (1988-89) 52
- H.K. Schmidt, L.R. Anderson and J.A. Schultz, Rapid and sensitive determination of hydrogen isotopes at a surface by Li<sup>+</sup> direct recoil spectroscopy
- 35 (1988-89) 274
- W. Lisowski, Kinetics and thermodynamics of hydrogen interaction with thin cobalt films
   X.-L. Zhou and J.M. White, Interaction between D<sub>2</sub> and N<sub>2</sub> on (100)
- 35 (1988-89) 399
- oriented W foil

  V.M. Belousov, J. Stoch, I.V. Batcherikova, E.V. Rozhkova and L.V.

  Lyashenko, Low-temperature hydrogen reduction of pure Co<sub>3</sub>O<sub>4</sub> and doped with palladium
- 35 (1988–89) 435 35 (1988–89) 481
- S.M. Hues, R.J. Colton, R.L. Mowery, K.J. McGrath and J.R. Wyatt, Determination of hydrogen in perfluorinated polyalkylethers using timeof-flight secondary ion mass spectrometry, infrared spectroscopy and nuclear magnetic resonance spectrometry
- 35 (1988-89) 507

### Infrared absorption

Y. Sakata, K. Domen, K. Maruya and T. Onishi, Decomposition of methanol over oxidized and reduced copper surfaces studied by double modulation Fourier transform infrared reflection absorption spectroscopy

35 (1988)

### 35 (1988-89) 363

### Infrared spectroscopy, see also Infrared absorption

- T. Szilágyi, Infrared spectra of methyl cyanide and methyl isocyanide adsorbed on Pt/SiO<sub>2</sub>
- 35 (1988-89) 19
- S. Akhter, K. Allan, D. Buchanan, J.A. Cook, A. Campion and J.M. White, XPS and IR study of X-ray induced degradation of PVA polymer film
- 35 (1988-89) 241
- Y. Sakata, K. Domen, K. Maruya and T. Onishi, Decomposition of methanol over oxidized and reduced copper surfaces studied by double modulation Fourier transform infrared reflection absorption spectroscopy
- 35 (1988-89) 363
- S.M. Hues, R.J. Colton, R.L. Mowery, K.J. McGrath and J.R. Wyatt, Determination of hydrogen in perfluorinated polyalkylethers using timeof-flight secondary ion mass spectrometry, infrared spectroscopy and nuclear magnetic resonance spectrometry
- 35 (1988-89) 507

## Ion bombardment

- H.K. Schmidt, L.R. Anderson and J.A. Schultz, Rapid and sensitive determination of hydrogen isotopes at a surface by Li<sup>+</sup> direct recoil spectroscopy
- 35 (1988-89) 274
- Ri-Sheng Li, A comparative study of the surface composition changes of a  $Au_{0.5}Cu_{0.5}$  alloy under nitrogen and argon ion bombardment
- 35 (1988-89) 409

#### Ion implantation

Y. Arnaud and M. Brunel, GIXD study of the kinetic evolution of nitrogen implanted steel surfaces at increasing fluences

### 35 (1988-89) 345

#### Ion scattering spectroscopy

S. Nishigaki, M. Ohara, A. Murakami, S. Fukui and S. Matsuda, Adlayer formation and its local charge states of Li on Si(111)7  $\times$  7 surface studied by  $\Delta \phi$ , MDS and AES

### 35 (1988-89) 121

#### Iron

- G. Haase, M. Asscher and U. Linke, Interaction of  $N_2$  with Fe covered Re(0001)
- 35 (1988-89) 1
- M. Es-Souni and A. Mosser, AES study of the effect of segregated sulfur on the oxidation of an Fe-6at%Si alloy surface
- 35 (1988-89) 219
- S. Sugimoto, S. Nagai and M. Hatada, Fischer-Tropsch reaction on iron catalysts prepared by electron beam implantation on Kapton film
- 35 (1988-89) 388
- L. Guczi, G. Kisfaludi, Z. Schay and A. Lovas, Surface structure and catalytic activity of rapidly quenched amorphous iron based alloys. III. Effect of surface composition
- 35 (1988-89) 469

#### Iron oxide

A.N. Buckley and G.W. Walker, The surface composition of arsenopyrite 35 (1988-89) 227 exposed to oxidizing environments Lithium S. Nishigaki, M. Ohara, A. Murakami, S. Fukui and S. Matsuda, Adlayer formation and its local charge states of Li on Si(111)7 × 7 surface studied 35 (1988-89) 121 by Δφ, MDS and AES H.K. Schmidt, L.R. Anderson and J.A. Schultz, Rapid and sensitive determination of hydrogen isotopes at a surface by Li+ direct recoil 35 (1988-89) 274 C. Jardin and D. Robert, AES and ELS characterization of surface oxides on Al-Li alloys 35 (1988-89) 495 Magnetic properties D.C. Miller, E.E. Marinero and H. Notarys, XPS oxidation study of TbFeCo 35 (1988-89) 153 films Metal-semiconductor interface E. Relling and A.P. Botha, Solid state diffusion in GaAs/AuGe/Ni and 35 (1988-89) 380 GaAs/Ni/AuGe/Ni ohmic contacts Methane J.H. Craig, Jr., Characteristic energies of electronically desorbed ions from 35 (1988-89) 520 Rh(100) Methanol Y. Sakata, K. Domen, K. Maruya and T. Onishi, Decomposition of methanol over oxidized and reduced copper surfaces studied by double modulation 35 (1988-89) 363 Fourier transform infrared reflection absorption spectroscopy Molybdenum C.L. Grove and L.D. Schmidt, The morphology of molybdenum catalysts 35 (1988-89) 199 Nickel X.-L. Zhou and J.M. White, Determining kinetic parameters from temper-35 (1988-89) 52 ature-programmed SIMS data M.C. Deibert and R.B. Wright, The surface composition and initial oxidation

of zirconium-nickel intermetallic compounds at room temperature

the adherence of oxides on superalloys

C.G.H. Walker and M.M. El Gomati, The role of zirconium and sulphur in

35 (1988-89) 93

35 (1988-89) 164

C.G. Walker and D.C. Peacock, Tests of surface segregation theory. I. The Ni-5Pt alloy, Applied Surface Science 26 (1986) 306. Erratum + Com-	
ment	35 (1988–89) 173
E. Relling and A.P. Botha, Solid state diffusion in GaAs/AuGe/Ni and GaAs/Ni/AuGe/Ni ohmic contacts	35 (1988-89) 380
L. Guczi, G. Kisfaludi, Z. Schay and A. Lovas, Surface structure and catalytic activity of rapidly quenched amorphous iron based alloys. III.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Effect of surface composition	35 (1988–89) 469
Nitric oxide	
H. Matsuta and K. Hirokawa, SERS and XPS observation of the adsorption behavior of NO and NO <sub>2</sub> on a silver powder surface	35 (1988–89) 10
Nitrogen	
G. Haase, M. Asscher and U. Linke, Interaction of N <sub>2</sub> with Fe covered	
Re(0001)  A.E.T. Kuiper, M.F.C. Willemsen and J.C. Barbour, Thin film reactions in	35 (1988–89) 1
the system Ti-Si-O-N	35 (1988-89) 186
Y. Arnaud and M. Brunel, GIXD study of the kinetic evolution of nitrogen implanted steel surfaces at increasing fluences	35 (1988–89) 345
J.W. Rogers, Jr., J.A. Kelber, M.A. Henderson and J.M. White, The interaction of trimethyl amine with a polyvinyl alcohol surface	35 (1988–89) 423
XL. Zhou and J.M. White, Interaction between D <sub>2</sub> and N <sub>2</sub> on (100) oriented W foil	35 (1988–89) 435
onened with	33 (1766–67) 433
Nuclear magnetic resonance	
S.M. Hues, R.J. Colton, R.L. Mowery, K.J. McGrath and J.R. Wyatt,	
Determination of hydrogen in perfluorinated polyalkylethers using time- of-flight secondary ion mass spectrometry, infrared spectroscopy and	
Determination of hydrogen in perfluorinated polyalkylethers using time- of-flight secondary ion mass spectrometry, infrared spectroscopy and nuclear magnetic resonance spectrometry	35 (1988–89) 507
of-flight secondary ion mass spectrometry, infrared spectroscopy and	35 (1988–89) 507
of-flight secondary ion mass spectrometry, infrared spectroscopy and nuclear magnetic resonance spectrometry  Optical properties  I. Ohlídal and F. Lukeš, Analysis of semiconductor surfaces with very thin	35 (1988–89) 507
of-flight secondary ion mass spectrometry, infrared spectroscopy and nuclear magnetic resonance spectrometry  Optical properties	35 (1988–89) 507 35 (1988–89) 259
of-flight secondary ion mass spectrometry, infrared spectroscopy and nuclear magnetic resonance spectrometry  Optical properties  I. Ohlidal and F. Lukeš, Analysis of semiconductor surfaces with very thin native oxide layers by combined immersion and multiple angle of incidence ellipsometry	
of-flight secondary ion mass spectrometry, infrared spectroscopy and nuclear magnetic resonance spectrometry  Optical properties  I. Ohlidal and F. Lukeš, Analysis of semiconductor surfaces with very thin native oxide layers by combined immersion and multiple angle of incidence ellipsometry  Organic molecules	
of-flight secondary ion mass spectrometry, infrared spectroscopy and nuclear magnetic resonance spectrometry  Optical properties  I. Ohlidal and F. Lukeš, Analysis of semiconductor surfaces with very thin native oxide layers by combined immersion and multiple angle of incidence ellipsometry	
of-flight secondary ion mass spectrometry, infrared spectroscopy and nuclear magnetic resonance spectrometry  Optical properties  I. Ohlidal and F. Lukeš, Analysis of semiconductor surfaces with very thin native oxide layers by combined immersion and multiple angle of incidence ellipsometry  Organic molecules  M. Savy, J. Riga and J.J. Verbist, XPS investigation of thionyl chloride action on iron phthalocyanines and naphthalocyanines and on hydrogen	35 (1988–89) 259
of-flight secondary ion mass spectrometry, infrared spectroscopy and nuclear magnetic resonance spectrometry  Optical properties  I. Ohlidal and F. Lukeš, Analysis of semiconductor surfaces with very thin native oxide layers by combined immersion and multiple angle of incidence ellipsometry  Organic molecules  M. Savy, J. Riga and J.J. Verbist, XPS investigation of thionyl chloride action on iron phthalocyanines and naphthalocyanines and on hydrogen phthalocynanine – correlations with the activity of Li/SOCl <sub>2</sub> cells	35 (1988–89) 259

M.C. Deibert and R.B. Wright, The surface composition and initial oxidation of zirconium-nickel intermetallic compounds at room temperature	35 (1988–89) 93
D.C. Miller, E.E. Marinero and H. Notarys, XPS oxidation study of TbFeCo	
films	35 (1988–89) 153
C.G.H. Walker and M.M. El Gomati, The role of zirconium and sulphur in the adherence of oxides on superalloys	35 (1988-89) 164
M. Es-Souni and A. Mosser, AES study of the effect of segregated sulfur on	
the oxidation of an Fe-6at%Si alloy surface  I. Ohlidal and F. Lukeš, Analysis of semiconductor surfaces with very thin native oxide layers by combined immersion and multiple angle of inci-	35 (1988–89) 219
dence ellipsometry  M.C. Deibert, B.P. Thiesen and R. Kahraman, Investigation by Auger	35 (1988–89) 259
spectroscopy of the composition and surface oxidation characteristics of	
oxygen saturated zirconium	35 (1988–89) 302
K. Hono, H.W. Pickering and T. Sakurai, An atom-probe field ion micro- scope study of the initial stages of oxidation of copper and copper-iron	
alloy	35 (1988-89) 327
<ul> <li>C. Jardin and D. Robert, AES and ELS characterization of surface oxides on Al-Li alloys</li> </ul>	35 (1988–89) 495
Oxygen	
M. Dean and M. Bowker, Adsorption studies on catalysts under UHV/HV conditions. I. Oxygen adsorption on alumina supported silver	35 (1988–89) 27
J.W. Rogers, Jr., K.L. Erickson, D.N. Belton, R.W. Springer, T.N. Taylor and J.G. Beery, Low temperature diffusion of oxygen in titanium and	33 (1900-02) 27
titanium oxide films	35 (1988-89) 137
A.E.T. Kuiper, M.F.C. Willemsen and J.C. Barbour, Thin film reactions in the system Ti-Si-O-N	35 (1988–89) 186
J.H. Craig, Jr., Characteristic energies of electronically desorbed ions from Rh(100)	35 (1988–89) 520
Palladium	
V.M. Belousov, J. Stoch, I.V. Batcherikova, E.V. Rozhkova and L.V. Lyashenko, Low-temperature hydrogen reduction of pure Co <sub>3</sub> O <sub>4</sub> and doped with palladium	35 (1988–89) 481
Plasma processing	,
R.B. Beck, A model for the kinetics of constant current plasma anodization process	35 (1988–89) 76
Platinum	
T. Szilágyi, Infrared spectra of methyl cyanide and methyl isocyanide adsorbed on Pt/SiO <sub>2</sub>	35 (1988–89) 19
C.G. Walker and D.C. Peacock, Tests of surface segregation theory. I. The	
Ni-5Pt alloy, Applied Surface Science 26 (1986) 306. Erratum + Com-	
ment	35 (1988–89) 173

35 (1988-89) 241

### **Polymers**

M.C. Burrell and J.J. Chera, Surface analysis of BPA-polycarbonate/poly 35 (1988-89) 110 (butylene terephthalate) blends by X-ray photoelectron spectroscopy L. Cota, E. Adem, M.J. Yacamán and G. Soto, Electron stimulated desorption study of irradiated poly(vinyl chloride) 35 (1988-89) 213 S. Akhter, K. Allan, D. Buchanan, J.A. Cook, A. Campion and J.M. White, XPS and IR study of X-ray induced degradation of PVA polymer film 35 (1988-89) 241 S. Sugimoto, S. Nagai and M. Hatada, Fischer-Tropsch reaction on iron catalysts prepared by electron beam implantation on Kapton film 35 (1988-89) 388 J.W. Rogers, Jr., J.A. Kelber, M.A. Henderson and J.M. White, The interaction of trimethyl amine with a polyvinyl alcohol surface 35 (1988-89) 423 S.M. Hues, R.J. Colton, R.L. Mowery, K.J. McGrath and J.R. Wyatt, Determination of hydrogen in perfluorinated polyalkylethers using timeof-flight secondary ion mass spectrometry, infrared spectroscopy and nuclear magnetic resonance spectrometry 35 (1988-89) 507 Polyvinyl chloride L. Cota, E. Adem, M.J. Yacamán and G. Soto, Electron stimulated desorption study of irradiated poly(vinyl chloride) 35 (1988-89) 213 Radiation damage

## Raman scattering

H. Matsuta and K. Hirokawa, SERS and XPS observation of the adsorption behavior of NO and NO<sub>2</sub> on a silver powder surface 35 (1988-89) 10

S. Akhter, K. Allan, D. Buchanan, J.A. Cook, A. Campion and J.M. White, XPS and IR study of X-ray induced degradation of PVA polymer film

### Reduction

V.M. Belousov, J. Stoch, I.V. Batcherikova, E.V. Rozhkova and L.V. Lyashenko, Low-temperature hydrogen reduction of pure Co<sub>3</sub>O<sub>4</sub> and doped with palladium
35 (1988-89) 481

#### Rhenium

G. Haase, M. Asscher and U. Linke, Interaction of N<sub>2</sub> with Fe covered Re(0001) 35 (1988-89) 1

#### Rhodium

J.H. Craig, Jr., Characteristic energies of electronically desorbed ions from Rh(100)
35 (1988-89) 520

### Rutherford backscattering

- J.W. Rogers, Jr., K.L. Erickson, D.N. Belton, R.W. Springer, T.N. Taylor and J.G. Beery, Low temperature diffusion of oxygen in titanium and titanium oxide films
- A.E.T. Kuiper, M.F.C. Willemsen and J.C. Barbour, Thin film reactions in the system Ti-Si-O-N
- E. Relling and A.P. Botha, Solid state diffusion in GaAs/AuGe/Ni and GaAs/Ni/AuGe/Ni ohmic contacts

### Scanning Auger microscopy

- C.G.H. Walker and M.M. El Gomati, The role of zirconium and sulphur in the adherence of oxides on superalloys
- M.M. El Gomati and C.G.H. Walker, Contrast reversal in SAM mapping due to changes in the substrate atomic number
- M. Ask, J. Lausmaa and B. Kasemo, Preparation and surface spectroscopic characterization of oxide films on Ti6Al4V 35 (1988-89) 283

## Scanning electron microscopy

- C.G.H. Walker and M.M. El Gomati, The role of zirconium and sulphur in the adherence of oxides on superalloys
- V.M. Belousov, J. Stoch, I.V. Batcherikova, E.V. Rozhkova and L.V. Lyashenko, Low-temperature hydrogen reduction of pure Co<sub>3</sub>O<sub>4</sub> and doped with palladium

# Secondary ion mass spectroscopy

- X.-L. Zhou and J.M. White, Determining kinetic parameters from temperature-programmed SIMS data
- M. Ask, J. Lausmaa and B. Kasemo, Preparation and surface spectroscopic characterization of oxide films on Ti6Al4V
- S.M. Hues, R.J. Colton, R.L. Mowery, K.J. McGrath and J.R. Wyatt, Determination of hydrogen in perfluorinated polyalkylethers using timeof-flight secondary ion mass spectrometry, infrared spectroscopy and nuclear magnetic resonance spectrometry

### Silicon

- S. Nishigaki, M. Ohara, A. Murakami, S. Fukui and S. Matsuda, Adlayer formation and its local charge states of Li on Si(111)7 × 7 surface studied by Δφ, MDS and AES
- A.E.T. Kuiper, M.F.C. Willemsen and J.C. Barbour, Thin film reactions in the system Ti-Si-O-N
- M. Es-Souni and A. Mosser, AES study of the effect of segregated sulfur on the oxidation of an Fe-6at%Si alloy surface
- I. Ohlidal and F. Lukeš, Analysis of semiconductor surfaces with very thin native oxide layers by combined immersion and multiple angle of incidence ellipsometry

- 35 (1988-89) 137
- 35 (1988-89) 186
- 35 (1988-89) 380
- 35 (1988-89) 164
- 35 (1988-89) 177

# 35 (1988-89) 164

- 35 (1988-89) 481

# 35 (1988-89) 52

- 35 (1988-89) 283
- 35 (1988-89) 507
- 35 (1988-89) 121
- 35 (1988-89) 186
- 35 (1988-89) 219
- 35 (1988-89) 259

# Silicon dioxide

R.B. Beck, A model for the kinetics of constant current plasma anodization process	35 (1988–89) 76
Silver	
<ul> <li>H. Matsuta and K. Hirokawa, SERS and XPS observation of the adsorption behavior of NO and NO<sub>2</sub> on a silver powder surface</li> <li>M. Dean and M. Bowker, Adsorption studies on catalysts under UHV/HV</li> </ul>	35 (1988–89) 10
conditions. I. Oxygen adsorption on alumina supported silver T.S. Sampath Kumar, R.M. Mallya and M.S. Hegde, Surface segregation and	35 (1988–89) 27
oxidation studies on Cu-Ni-Sn and Ag-Cu-Ge ternary alloys  A. Bukaluk, Determination of the activation energy of Ag diffusion through grain boundaries of thin Au films by using AES in a simplified accumula-	35 (1988–89) 63
tion method	35 (1988–89) 317
Stainless steel	
Y. Arnaud and M. Brunel, GIXD study of the kinetic evolution of nitrogen implanted steel surfaces at increasing fluences	35 (1988–89) 345
Sulphides	
A.N. Buckley and G.W. Walker, The surface composition of arsenopyrite exposed to oxidizing environments	35 (1988–89) 227
Sulphur	
C.G.H. Walker and M.M. El Gomati, The role of zirconium and sulphur in the adherence of oxides on superalloys M. Es-Souni and A. Mosser, AES study of the effect of segregated sulfur on	35 (1988–89) 164
the oxidation of an Fe-6at%Si alloy surface	35 (1988–89) 219
Surface analysis	
<ul> <li>XL. Zhou and J.M. White, Determining kinetic parameters from temper- ature-programmed SIMS data</li> <li>H.K. Schmidt, L.R. Anderson and J.A. Schultz, Rapid and sensitive de-</li> </ul>	35 (1988–89) 52
termination of hydrogen isotopes at a surface by Li <sup>+</sup> direct recoil spectroscopy	35 (1988–89) 274
Surface composition	
T.S. Sampath Kumar, R.M. Mallya and M.S. Hegde, Surface segregation and oxidation studies on Cu-Ni-Sn and Ag-Cu-Ge ternary alloys C.G. Walker and D.C. Peacock, Tests of surface segregation theory. I. The	35 (1988–89) 63
Ni-5Pt alloy, Applied Surface Science 26 (1986) 306. Erratum + Comment	35 (1988–89) 173

M. Es-Souni and A. Mosser, AES study of the effect of segregated sulfur on the oxidation of an Fe-6at%Si alloy surface	35 (1988–89) 219
Y. Arnaud and M. Brunel, GIXD study of the kinetic evolution of nitrogen implanted steel surfaces at increasing fluences	35 (1988–89) 345
<ul> <li>Ri-Sheng Li, A comparative study of the surface composition changes of a Au<sub>0.5</sub>Cu<sub>0.5</sub> alloy under nitrogen and argon ion bombardment</li> <li>C. Jardin and D. Robert, AES and ELS characterization of surface oxides on</li> </ul>	35 (1988–89) 409
Al-Li alloys	35 (1988–89) 495
Surface structure	
L. Guczi, G. Kisfaludi, Z. Schay and A. Lovas, Surface structure and catalytic activity of rapidly quenched amorphous iron based alloys. III. Effect of surface composition	35 (1988–89) 469
Thermal desorption	
<ul> <li>XL. Zhou and J.M. White, Determining kinetic parameters from temper- ature-programmed SIMS data</li> <li>W. Lisowski, Kinetics and thermodynamics of hydrogen interaction with thin</li> </ul>	35 (1988–89) 52
w. Lisowski, kinetics and thermodynamics of hydrogen interaction with thin cobalt films	35 (1988-89) 399
J.W. Rogers, Jr., J.A. Kelber, M.A. Henderson and J.M. White, The interaction of trimethyl amine with a polyvinyl alcohol surface	35 (1988–89) 423
Thin films	
A.E.T. Kuiper, M.F.C. Willemsen and J.C. Barbour, Thin film reactions in the system $Ti$ - $Si$ - $O$ - $N$	35 (1988–89) 186
Titanium	
J.W. Rogers, Jr., K.L. Erickson, D.N. Belton, R.W. Springer, T.N. Taylor and J.G. Beery, Low temperature diffusion of oxygen in titanium and	
titanium oxide films	35 (1988–89) 137
A.E.T. Kuiper, M.F.C. Willemsen and J.C. Barbour, Thin film reactions in the system Ti-Si-O-N	35 (1988–89) 186
Titanium oxide	
J.W. Rogers, Jr., K.L. Erickson, D.N. Belton, R.W. Springer, T.N. Taylor and J.G. Beery, Low temperature diffusion of oxygen in titanium and	
titanium oxide films  M. Ask, J. Lausmaa and B. Kasemo, Preparation and surface spectroscopic	35 (1988–89) 137
characterization of oxide films on Ti6Al4V	35 (1988–89) 283
Tungsten	
XL. Zhou and J.M. White, Interaction between D <sub>2</sub> and N <sub>2</sub> on (100) oriented W foil	35 (1988–89) 435
Official w for	33 (1900-09) 433

35 (1988-89) 469

#### Vanadium

Effect of surface composition

M. Ask, J. Lausmaa and B. Kasemo, Preparation and surface spectroscopic characterization of oxide films on Ti6Al4V 35 (1988-89) 283 Water H. Matsuta and K. Hirokawa, SERS and XPS observation of the adsorption behavior of NO and NO2 on a silver powder surface 35 (1988-89) 10 Work function S. Nishigaki, M. Ohara, A. Murakami, S. Fukui and S. Matsuda, Adlayer formation and its local charge states of Li on Si(111)7 × 7 surface studied by Δφ, MDS and AES 35 (1988-89) 121 X-ray diffraction Y. Arnaud and M. Brunel, GIXD study of the kinetic evolution of nitrogen implanted steel surfaces at increasing fluences 35 (1988-89) 345 X-ray photoelectron spectroscopy H. Matsuta and K. Hirokawa, SERS and XPS observation of the adsorption 35 (1988-89) 10 behavior of NO and NO2 on a silver powder surface T.S. Sampath Kumar, R.M. Mallya and M.S. Hegde, Surface segregation and oxidation studies on Cu-Ni-Sn and Ag-Cu-Ge ternary alloys 35 (1988-89) 63 M.C. Burrell and J.J. Chera, Surface analysis of BPApolycarbonate/poly(butylene terephthalate) blends by X-ray photoelectron spectroscopy 35 (1988-89) 110 D.C. Miller, E.E. Marinero and H. Notarys, XPS oxidation study of TbFeCo 35 (1988-89) 153 A.N. Buckley and G.W. Walker, The surface composition of arsenopyrite exposed to oxidizing environments 35 (1988-89) 227 S. Akhter, K. Allan, D. Buchanan, J.A. Cook, A. Campion and J.M. White, XPS and IR study of X-ray induced degradation of PVA polymer film 35 (1988-89) 241 M. Ask, J. Lausmaa and B. Kasemo, Preparation and surface spectroscopic 35 (1988-89) 283 characterization of oxide films on Ti6Al4V T.F. McGee III and H.J. Cornelissen, X-ray photoelectron spectroscopy of 35 (1988-89) 371 etched ZnSe J.W. Rogers, Jr., J.A. Kelber, M.A. Henderson and J.M. White, The interaction of trimethyl amine with a polyvinyl alcohol surface 35 (1988-89) 423 M. Savy, J. Riga and J.J. Verbist, XPS investigation of thionyl chloride action on iron phthalocyanines and naphthalocyanines and on hydrogen phthalocynanine - correlations with the activity of Li/SOCl2 cells 35 (1988-89) 454 L. Guczi, G. Kisfaludi, Z. Schay and A. Lovas, Surface structure and catalytic activity of rapidly quenehed amorphous iron based alloys. III.

V.M. Belousov, J. Stoch, I.V. Batcherikova, E.V. Rozhkova and L.V. Lyashenko, Low-temperature hydrogen reduction of pure Co<sub>3</sub>O<sub>4</sub> and doped with palladium 35 (1988-89) 481 Zinc T.F. McGee III and H.J. Cornelissen, X-ray photoelectron spectroscopy of 35 (1988-89) 371 etched ZnSe Zirconium H. Bala and S. Szymura, Acid corrosion of amorphous and crystalline Cu-Zr 35 (1988-89) 41 M.C. Deibert and R.B. Wright, The surface composition and initial oxidation of zirconium-nickel intermetallic compounds at room temperature 35 (1988-89) 93 C.G.H. Walker and M.M. El Gomati, The role of zirconium and sulphur in 35 (1988-89) 164 the adherence of oxides on superalloys M.C. Deibert, B.P. Thiesen and R. Kahraman, Investigation by Auger spectroscopy of the composition and surface oxidation characteristics of oxygen saturated zirconium 35 (1988-89) 302 Zirconium oxide

35 (1988-89) 302

M.C. Deibert, B.P. Thiesen and R. Kahraman, Investigation by Auger spectroscopy of the composition and surface oxidation characteristics of

oxygen saturated zirconium

